



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,073	08/21/2000	Irfan Amanat	T30411US	8199

7590 07/23/2004

ROBERT M GRAY
CONLEY ROSE PC
P O BOX 3267
HOUSTON, TX 77253-3267

EXAMINER

PATEL, JAGDISH

ART UNIT	PAPER NUMBER
----------	--------------

3624

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SUPPLEMENTAL
Office Action Summary

Application No.

09/643,073

Applicant(s)

AMANAT ET AL.

Examiner

JAGDISH PATEL

Art Unit

3624

MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 3624

(SUPPLEMENTARY) DETAILED ACTION

Specification

1. The attempt to incorporate subject matter into this application by reference to application 09/574,591 is in improper form because the subject matter includes document in its entirety as an appendix. The related application should be incorporated in the specification as a reference by incorporation and the appendix should be deleted from the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 (and dependent claims 2-10) : recites at line 17 "...and optionally also dependent upon..." which renders the claim indefinite because it fails point out under what conditions this condition is exercised or applied in the determining that the port is overloaded.

5. Furthermore, claim 1 recites at lines 18-19: "...the determination being dependent upon the previously-sent

Art Unit: 3624

order..". This limitation fails to clearly state that the determination is dependent upon certain attribute(s) or properties of the order and not the order itself. (Note: as interpreted herein an order itself is a document or data file which comprises a plurality of data elements having a pre-designated attributes such as type of order, tracking number, time of transmission of order etc.). This analysis pertains to all occurrences of limitation "order" such as "previously sent order" etc.

6. system claim 11 and dependent claim also contain similar deficiencies.

7. Claims 3-6 are rejected as having limitations which do not functionally relate to the process steps of limitations recited in independent claim 1 upon which these claims dependent. As an example, claim 3 recites limitation "decrementing a net order count for the port". It is asserted that this process is carried out without or independent of performing any process steps of claim 1. In other words the decrementing function is not functionally related to the functionality of claim 1. This deficiency renders the claims indefinite.

Claims 4-6 are also interpreted in a similar manner.

Art Unit: 3624

8. Claims 8-10 are not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. Independent claims 1 and 7 upon which claims 8-10 depend refer to a method. However, claims 8-10 recites a limitation of a system component ("the port comprises..").

9. Claim 12 recites: "wherein the processor programmed to determine that the port is not overloaded comprises the processor programmed to determine that a .." is not clear as to what the claim intends to limit.

10. Claims 18-20 recite limitation "a data structure for the port". However, there is no link is made to any element of claim 11 to the "data structure". If the claim intends to further limit "data communication ports" there must be such element recited as a structure of the system. However, the system of claim 11 does not recite "the port" as a functional element.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 3624

12. Claims 8-10 are rejected under 35 U.S.C. §101 because the claimed invention is directed to a non statutory subject matter.

35 U.S.C. §101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture or composition of matter or new and useful improvement thereof" (emphasis added). Applicant's claims mentioned above are intended to embrace or overlap two different statutory classes of invention as set forth in 35 U.S.C. §101. The instant claims contain limitations of a method and a system (see rejection of claims under 35 U.S.C. §112, second paragraph, for specific details regarding this issue). "a claim of this type is precluded by express language of 35 U.S.C. §101 which is drafted so as to set forth statutory the statutory classes of invention in the alternative only", Ex parte Lyell (17USPQ2d 1548).

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1,2, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Buhannic et al (US 2002/0023048 A1 priority 6/26/00) (hereafter Buhannic).

Claims 1 and 2. Buhannic teaches a method of balancing data communications loads among data communications ports in

Art Unit: 3624

systems for automated trading of securities, the systems including at least one broker-dealer system coupled through at least one data communications system to more than one market system, the data communications system including a multiplicity of ports organized so that one market is coupled to the broker-dealer system through more than one port, the method operating as an adjunct to a broker-dealer system, the method applied when a new order from the broker-dealer system is available and ready to be sent through a port to a market; the method being applied continually in turn to each of the ports assigned to a market, (securities trading system, abstract, Figure 1, item 10) (note that Buhanic discloses markets as "exchanges" as parties associated with trade transactions, see para [0019]) the method comprising the steps of:

receiving through a port from a market to which the port is coupled a new acknowledgment of an order previously sent through the port from the broker-dealer system to the market;

sending the new acknowledgment to the broker-dealer system;

determining that the port is not overloaded, the determination being dependent upon the previously-sent order, the new acknowledgment, and optionally also

Art Unit: 3624

dependent upon other previous orders and upon previous acknowledgments; and

sending a new order through the port to the market, the sending of the new order being dependent upon the determination that the port is not overloaded.

(referring to [0015] Latency check module 120 establishes communication with each of servers 200, 210, 220, and 230, through the respective latency modules 202, 212, 222, and 232, to continuously check latency of system 10 in general and each server in particular. For example, Packet Internet Groper (PING) technology can be used to send a packet of data between the appropriate servers and logic in latency check module 120 can measure the time required for a reply from the appropriate latency module. Note that each latency modules may correspond to a different market as shown in Fig. 2)

(refer to the time required for a reply from the appropriate module in para [0015],)

(para [0015] ..latency check module can measure the time required for a reply from the appropriate latency module)

(para [0019] FIG. 2 illustrates latency chart 300 of the preferred embodiment which can be displayed on a display device of any computer coupled to the system and authorized to view latency information. Column 302 designates the name of the external linkage, e.g., the server associated with a buy side party or a sell side party. Column 304 designates the geographic region of the external linkage. Column 306 indicates whether the linkage is direct from the system of through a counter party. Column 308 indicates the latency time for the linkage based on the tests described above. .. Column 310 indicates the type of party associated with the linkage, such as an exchange, a clearer, an allocation system, and the like.)

([0006] this limitation is inherently met because the latency measured in Buhannic pertains to electronic trading systems comprising electronic communication networks which inherently comprise all components of the networks including one or more communication ports as is well known in the data communication art. Note that a latency module corresponds to a market in view of each node 100 as described on para [0011] and [0012])

([0015] ..latency modules measures time required for a reply from the appropriate latency module, noting that a latency module corresponds to a market in view of each node 100 as described on para [0011] and [0012])

Art Unit: 3624

15. Claims 11 and 12 correspond to method claims 1 and 2 respectively and are similarly analyzed.

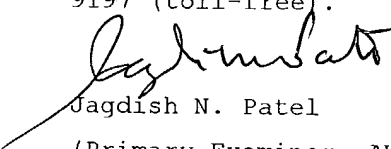
Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (703)308-7837. The examiner can normally be reached on 800AM-600PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703)308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jagdish N. Patel

(Primary Examiner, AU 3624)

7/20/04